

same behind 6.5 mm.; height of cephalothorax 3.5 mm.; length of abdomen 12.8 mm.; breadth and height of same 8.2 mm.; length of mandibles 4.75 mm.; of claw 2.2 mm.; of palpi 10.5 mm.; of first pair of legs 25 mm.; of second pair 23.5 mm.; of third pair 21.5 mm.; of fourth pair 28 mm.

The young on the parent's back differ from the adult in having a broader dorsal stripe upon the abdomen, giving them the appearance of being dark above, with silvery sides; they are about as long as the last joint of the third pair of legs.

The egg cocoon is an irregularly spherical mass, 8 mm. in average diameter, of a pale bluish gray color, smooth in some parts, rough in others; it is attached by a thick silken cord to the abdomen of the mother, being grasped by the hinder pair of mammillae.

Samuel H. Scudder.

## BIBLIOGRAPHICAL RECORD.

The date of publication, here given in brackets [ ], marks the time at which the work was received by the Editor, unless an earlier date of publication is known to him. An asterisk \* before a title is the Recorder's certificate of accuracy of quotation. Corrections of errors and notices of omissions are solicited. — B. PICKMAN MANN.

(Continued from Vol. I, page 216.)

The Proceedings of the American Academy of Arts and Sciences, vols. ix and xi (ser. 2, vols. i and iii) contain nothing entomological; vol. x (ser. 2, vol. ii) contains No. 716.

\* 716. S. H. Scudder. Historical Sketch of the Generic Names proposed for Butterflies: a Contribution to Systematic Nomenclature. p. 91-293. [April, 1875.]

Decision, founded upon historical evidence and given canons of systematic nomenclature, concerning the validity of each name proposed for a genus of butterflies and the species to be considered as typical of each genus; discussion of some principles of nomenclature; attempt to fix the dates of Hübner's different works and of Doubleday and Westwood's Genera of Diurnal Lepidoptera. Discusses about 1104 names; Acentrocheme (Feld.) and Lethites appear for the first time as generic names.

The **Proc. Bost. Soc. Nat. Hist.** [See Rec., Nos. 173–182], vol. xvii, from p. 257, contain Nos. 717 to 728.

\* 717. S. H. Scudder. Notes on Orthoptera from Northern Peru, collected by Prof. James Orton. p. 257–282. [March, 1875.]

Enumerates 46 species, including two not from Peru. Describes Gryllo-

talpa maranona = 1 n. sp. Gryllides; Steirodonopes, S. bilobata, Orophus peruvianus, Phylloptera tripunctata, Anallomes, A. unipunctata, A. maranona, Coelophyllum, C. simplex, Meroncidius transvittatus, Leptotettix tessellata, Conocephalus infuscatus, Orchelimum Ortoni = 3 gen., 10 n. spp. Locustariae; Astroma hastata, Mastax nigra, M. Gundlachii (from Cuba), Hippacris, H. crassa, Zonocerus? bilineatus, Machaerocera nigromarginata, Prorhachis, P. granulosa, (Aeolacris), Elaeochlora Brunneri, Aplatacris, A. colorata, Ommatolampis leucoptera, O. aptera, O. nigrogutata, Phaeoparia curtipennis, Acridium (Osmilia) Saussurei, Euparnops, E. caeruleum, Cornops, C. bivittatum, Coelopterna Stâlii, Tettigidea cuspidata = 6 n. gen., 18 n. spp. Acrydii; Bacteria nigripes, B. exigua, Phasma radiatum = 3 n. spp. Phasmida; Panchlora signifera = 1 n. sp. Blattariae; Thermastris Dohrnii, Neolobophora, N. bogotensis (from Bogota) = 1 n. g., 2 n. spp. Forficulariae; in all = 10 n. gen., 35 n. spp.

\* 718. P. R. Uhler. List of the Species of Hemiptera and Neuroptera, obtained by Prof. James Orton, in Northern Peru. p. 282-286. [March, 1875.]

Enumerates, with descriptive and geographical notes, 9 species of Heteroptera and describes *Pachyceris discrepans* = 1 n. sp.; 6 species of Homoptera and describes *Carineta socia* = 1 n. sp.; 1 Neuropteron and 1 Pseudo-Neuropteron.

\* 719. Charles V. Riley. Description of a new species of Agrotis. p. 286–288. [March, 1875.]

Describes Agrotis Morrisoniana n. sp.

\* 720. S. H. Scudder. Description of some Labradorian Butterflies. p. 294-314. [March, April, 1875.]

Gives detailed descriptions of Brenthis Triclaris (= "Arg. Lais"), B. Chariclea (= Arg. Boisduvalii = "Arg. Oenone"), B. Freija (compared with B. Montinus), B. polaris, B. Frigga, Agriades Aquilo (=? Polyommatus Franklinii).

\* 721. P. S. Sprague. On the Species of Coleoptera described by Mr. J. W. Randall. With Notes by E. P. Austin. p. 373-385. [May, June, 1875.]

Remarks upon the state of entomology in the year 1837, and attempts to identify the species of Coleoptera described by Mr. Randall in the Journal of the Boston Society of Natural History, vol. 11, 1838; synonymical list of all the (nominally 84) species.

\* 722. S. H. Scudder. A Century of Orthoptera. Decade II. — Locustariae. p. 454–462, fig. 1–5. [July, 1875.]

Describes Stålia, S. foliata (fig. 3-5) from Old Calabar, Lirometopum, L. coronatum (fig. 1-2) from New Granada, Belocephalus, B. subapterus from Florida, Orchelimum nigripes from Texas, Xiphidium strictum from Texas, X. antipodum from New Zealand, X. meridionale from Brazil, X. ictum

from Mexico and Guatemala, X. gossypii from Southern United States, X. nemorale from Iowa  $\equiv 3$  n. gen., 10 n. spp.

\* 723. S. H. Scudder. Spharagemon, — a Genus of Œdipodidæ; with a Revision of the Species. p. 467–471. [July, 1875.]

Describes Spharagemon, S. Bolli, S. balteatum, S. cristatum = 1 n. g., 3 n. spp.; synopsis of the (6) species, with synonymy and references.

\* 724. S. H. Scudder. A Century of Orthoptera. Decade III. — Acrydii (Pezotettix, Caloptenus). p. 472–478. [July, 1875.]

Describes Pezotettix olivacea, P. acutipennis, Caloptenus ponderosus, C. robustus, C. devorator, C. deletor, C. helluo, C. glaucipes, all from Texas; describes C. fasciatus and C. minor from Nebraska; in all = 10 n. spp.

\* 725. S. H. Scudder. Revision of two American genera of Œdipodidæ. p. 478-485. [July, 1875.]

Describes Encoptolophus, E. parvus from Texas, Tragocephala brevipennis from California, T. cubensis from Cuba = 1 n. g., 3 n. spp.; enumerates 3 spp. of Encoptolophus and 4 spp. of Tragocephala, with synopses and synonymy; dimorphism and geographical variations of T. viridifasciata = virginiana + infuscata.

\* 726. T. THORELL. Notice of some Spiders from Labra dor. p. 490-504. [July, Aug., 1875.]

Enumerates 10 species identified, with descriptive and geographica notes; describes Epeira Packardii, Linyphia Emertonii, Clubiona frigidula Gnaphosa brumalis, Lycosa furcifera, L. fuscula, L. labradorensis = 7 n. spp.

\* 727. J. H. EMERTON. On the Structure of the Palpal Organs of Male Spiders. p. 505-507, fig. 1-2. [Aug., 1875.]

Notices the contents of some previous writings upon the subject; figures the organs as seen in Mygale and Epeira, and describes these and others.

\* 728. S. H. Scudder. A Century of Orthoptera. Decade IV.—Acrydii. p. 510-517. [Aug., 1875.]

Describes Chlocaltis brunnea, Amblytropidia subhyalina, Gomphocerus virgatus, Psoloessa, Ps. texana, Ps. ferruginea, Ps. maculipennis, Arphia simplex, A. conspersa, A. luteola, from Texas; describes Phlibostroma, Ph. pictum from Nebraska; in all 2 n. g., 10 n. spp.

- \* 729. The **Proc. Bost. Soc. Nat. Hist.**, vol. xviii, contain the following, and Nos. 730 to 744.
- a. Custodian's Report on the Collection of Insects [statement of accessions and of work done] (by A. Hyatt), pp. 6, 12-14, 339. b. Vanessa cardui probably indigenous to the American continent (by S. H. Scudder); not found in the Hawaiian Islands and probably not in Tahiti in 1840 (by

Dr. Chas. Pickering), p. 201–202. c. The hind wings of cockroaches and earwigs are folded in repose in a very complex manner (by S. H. Scudder), p. 236. d. The presence of white ants in New England threatens us with dangers (by H. A. Hagen), p. 242. e. Syritta pipiens and Chrysophanus americana engage in the cross fertilization of the dandelion, upon which flowers Colias philodice and Pieris rapae are also noticed (by G. Dimmock), p. 401.

\* 730. H. A. Hagen. Synopsis of the Odonata of America. p. 20-96. [Aug. — Oct., 1875.]

"A complete list of all species hitherto described or known to me" [the author] (except the subfamily Agrionina), with localities and synonymy. Enumerates "480" (about 258 N. A.) names, about 90 of which apply, however, to species of which no descriptions have ever been published, some of these names being nearly twenty years old, and at least 15 to species never described and not known to the author!

\* 731. S. H. Scudder. On Fossil Insects from Cape Breton. p. 113-114. [Oct., 1875.]

Notice of a fossil Odonat larva, possibly that of *Haplophlebium Barnesii*, and of some previously found related fossils.

\* 732. H. K. Morrison. Notes on the Noctuidæ. p. 114-126. [Oct., 1875.]

Describes Dicopis electilis, Agrotis digna, A. infracta, A. manifesta, A. oblata, A. praefixa, Mamestra repentina, M. ectypa, M. rugosa, Segetia marsa, Nonagria laeta, Heliophila pertracta, Caradrina derosa, Cucullia luna, Chariclea pretiosa, Schinia media, Polenta, Tarache obatra, Homophoberia, H. cristata = 2 n. gen., 18 n. spp.; describes Syneda graphica var. media n. var.; re-describes Agrotis claviformis, Caradrina tarda; Agrotis gilvipennis = A. chardinyi; Mamestra rufula and M. brassicae = M. lubens; Anthoecia spraguei = A. arcifera.

\* 733. C. R. Osten Sacken. Note on some Diptera from the Island Guadalupe (Pacific Ocean), collected by Mr. E. Palmer. p. 133–134. [Nov., 1875.]

List of 12 species of Diptera [11 determined only as to genus], *Micromus (Berotha) flavicornis* [found also in the U. S.], and one undetermined species each of Psocus, Aphidae, Psyllidae and Ophion, recorded for future reference.

\* 734. C. R. OSTEN SACKEN. On the North American Species of the Genus Syrphus (in the narrowest Sense). p. 135–153. [Nov., 1875.]

Geographical distribution of the genus; detailed comparison of *S. torvus* and *S. rectus*, with the supposition in view that they may be seasonally dimorphic forms of one species, identical with *S. topiarius—vitripennis—ribesii* of Europe [see Rec., No. 683]; analytical table of the 10 species de-

scribed in the present paper. S. torvus, S. rectus, S. contumax, S. amalopis = 4 n. spp. Notes on synonyms or insufficient descriptions of other species; correction of the article cited in Rec., No. 157.

\* 735. S. H. Scudder. Notice of a small collection of Butterflies made by Mr. Roland Thaxter, on Cape Breton Island. p. 188–190. [Jan., 1876.]

List of the (14) species taken, remarks on Argynnis Cybele, Rusticus Scudderii, Chrysophanus Epixanthe, Eurymus Philodice, Limochores Taumas.

\* 736. B. P. Mann. Monstrosities in Anisopteryx vernata [and pometaria]. p. 201. [Feb., 1876.]

Describes a female of A. pometaria as having partially developed wings and pectinated antennæ. [See Rec., No. 7.]

\* 737. H. K. Morrison. Descriptions of New North American Noctuidæ. p. 237–241. [April, May, 1876.]

Describes Agrotis perpolita, A. Fauna, A. Olivia, A. comosa, A. hero, A. personata, A. orthogonia, Segetia proxima, Homoglaea, H. hircina, Taeniocampa revicta, Homoptera penna=1 n. g., 11 n. spp.

\* 738. S. H. Scudder. A Century of Orthoptera. Decade V. — Forficulariæ (Exotic). p. 251–257. [May, 1876.]

Describes Cylindrogaster nigra from Para, Labidura auditor from Natal, Chelisoches comprimens from Africa, Ancistrogaster arthritica from Brazil Forficula variana from Liberia, F. vellicans, F. luteipes, F. variicornis, F. hirsuta, Labia arcuata from Brazil = 10 n. spp.; proposes the generic name Chelisoches in place of Lobophora preoccupied.

\* 739. S. H. Scudder. A Century of Orthoptera. Decade VI. — Forficulariæ (N. American). p. 257–264. [May, 1876.]

Describes Neolobophora volsella from Mexico, Thermastris chontalia from Nicaragua, Spongophora forfex from ?, Ancistrogaster gulosa, Forficula vara, F. tolteca from Mexico, F. exilis from Texas, F. aculeata from U. S. and Cuba?, Labia rotundata from Mexico, L. brunnea from Cuba = 10 n. spp.; amends the description of genus Neolobophora.

\* 740. S. H. Scudder. Description of Three Species of Labia from the Southern United States. p. 265-268. [May, 1876.]

Describes Labia guttata from Texas, L. Burgessii from Florida, L. melancholica from Texas = 3 n. spp.

\* 741. S. H. Scudder. Orthoptera from the Island of Guadalupe. p. 268-271. [May, 1876.]

Describes Gryllus insularis, Acridium vagum (also from California), Trimerotropis vinculata (also from California and Mexico), T. lauta = 4 n. spp.

\* 742. S. H. Scudder. Critical and Historical Notes on Forficulariæ; including Descriptions of new Generic Forms and an Alphabetical Synonymic List of the Described Species. p. 287-332. [July—Oct., 1876.]

Explanation and tabulation of the synonymy of the group; examination of all the generic names previously proposed for members of the family, to determine their validity and proper use. Treats of 36 generic names; establishes Anechura, Carcinophora, Labidophora (in place of Platylabia excluded), Typhlolabia = 4 new genera. Enumerates 251 species, with synonymy and localities.

\* 743. S. H. Scudder. On the Carboniferous Insects of Europe and America. p. 358-359. [Dec., 1876.]

The insect faunas of Europe and America were as intimately related in Carboniferous times as now.

\* 744. A. R. Grote. Notes on Noctuæ from Florida. p. 414-417. [Jan., Feb., 1877.]

Describes Perigea Icole, Heliophila pilipalpis, Lygranthoecia scissa, Phurys glans = 4. n. spp.; enumerates 13 spp. collected in Florida by R. Thaxter, Eriopus granitosa and Ophideres materna being new to this country; notes on the habits of Ophideres.

- \* 745. S. H. Scudder. Entomological Notes. III. From the Proceedings of the Boston Society of Natural History. 8vo. pg. 34, with one plate containing 17 groups of figures. [June, 1875.]
- a. Description of the Larva and Chrysalis of Papilio Eurymedon Boisd., of California. p. 1-2.

[From vol. XIII, p. 221-222 (April, 1870), where the species described is said to be *P. Rutulus*, but is referred to in the index, p. 434, as *P. Eurymedon*. (See Errata, p. 428.)]

b. On the Synonymy of Thecla calanus. p. 3-7.

[From vol. XIII, p. 272-276 (Aug., 1870).] Describes *Th. calanus* and *Th. Edwardsii* n. sp., with synonymic notes.

c. On Asymmetry in the Appendages of Hexapod Insects, especially as illustrated in the Lepidopterous Genus Nisoniades. (with Edward Burgess.) p. 7-31, plate.

[From vol. XIII, p. 282–306, plate (Aug., Nov., 1870).] Mentions cases of asymmetry in several classes of animals; describes the kind of asymmetry found in the abdominal clasps of males of Nisoniades. Characterizes by these appendages, which are figured, 16 (N. Lucilius Lintn., N. Icelus Lintn., N. Terentius, N. funeralis, N. Ovidius, N. Ennius, N. Propertius, N. Tibullus, N. Horatius, N. Virgilius, N. Plautus = 11 new) species of Nisoniades; figures the appendages of Phora microcephala?; synonymical notes.

- d. [Same as Rec., No. 4. (Jan., 1874.)] p. 32-33.
- e. [Same as Rec., No. 8. (March, 1874.)] p. 33-34.

\* 746. **S. H. Scudder.** Entomological Notes IV Reprinted from the Proceedings of the Boston Society of Natural History, Vol. XVII, 1874–5. Boston 1875 8vo. pg. 91, fig. 1–5. [Aug., 1875.]

Title, p. 1. Reprint of the articles cited in this Record, Nos. 179, 181, 717, 720, 722, 723, 724, 725, 728, occupying, respectively, pp. 2-7, 7-10, 11-36, 37-57, 57-65 (with fig. 1-5), 66-70, 71-77, 77-84, 84-91.

\* 747. **S. H. Scudder.** Entomological Notes V Reprinted from the Proceedings of the Boston Society of Natural History Vol. XVIII, 1875–76 Boston 1876 '8vo. pg. 72. [Nov., 1876.]

Title, p. 1. Reprint of the articles cited in this Record, Nos. 731 ["Remarks on some Remains of Insects occurring in Carboniferous Shale at Cape Breton"], 735, 738, 739, 740, 741, 742, occupying, respectively, pp. 2-3, 3-5, 6-12, 12-19, 20-23, 23-26, 27-72.

\* 748. C. Stål. Recensio Orthopterorum. — Revue critique des Orthoptères décrits par Linné, De Geer et Thunberg. 1–3. Stockholm, Norstedt. 8vo.

[The enumeration of species is not meant to be complete.]

1. 1873. pg. 4, 20, 154. [Sept., 1874.]

Title; dedication. Introduction; nomenclature resp. laws of priority; difficulties in characterizing systematic groups; nomenclature of veins and areas of wings. Systematization of the family Acridiodea; defines synoptically 11 (5 N. A.) subfamilies, in 8 of which 112 genera are defined synoptically, 8 of which genera include 23 (3 N. A.) subgenera; enumerates 110 (24 N. A.) (51 [15 N. A.] new) genera and subgenera and 267 (38 N. A.) (41 [11 N. A.] new) species. The new genera and the N. A. species are: Ochrophlebia [Phymatidae]; Prionolopha, Oncolopha, Dictyophorus reticulatus, Taeniopoda, T. superba, T. picticornis!, Rhomalea colorata, Zoniopoda, Hermistria, H. pulchripes!, Coscineuta, C. virens, Tetrataenia, Taeniophora, Rhytidochrota, Goniaea, Phaeoparia, Coptaera, Traulia, (Schistocerca [s. g. Acridium]), A. (S.) americanum, A. (S.) pallens, A. (S.) columbinum, (Osmilia [s. g. Acridium]), A. (O.) flavolineatum, (Stropis [s. g. Acridium]), Orbillus, Cirphula, Vilerna, (Sphodromerus, Euryphymus [s. g. Calliptenus]), (Tylotropidius, Trigonophymus, Dichroptus, Melanoplus [s. g. Pezotettix]), P. (M.) femur rubrum, P. (M.) Borckii, Tristria, Stenopola, (Oxyblepta [s. g. Stenopola]), Arnilia, A. cylindrodes, Leptysma, L. marginicollis, Tropidopola [Acridiidae]; Machaeridia, Achurum acridodes, Mermiria, M. Belfragii!, Syrbula, S. Montezuma, S. leucocerca!, Ochrilidia, Truxalis brevicornis, T. angusticornis!, (Orphula [s. g. Truxalis]), Amblytropidia, Seyllina, S. viatoria, Primnia [Truxalidae]; Tragocephala viridifasciata, T. sordida, T. costalis, Arphia, A. sulphurea,

<sup>&</sup>lt;sup>1</sup> Record revised by Mr. S. H. Scudder.

A. sanguinaria!, Camnula, C. tricarinata, Hippiscus discoideus, Psophus, Pycnodictya, Cosmorhyssa, Prionidia, Heteropternis, Oedipoda carolina, O. Belfragii!, O. punctata!, O. venusta, O. trifasciata, Trilophidia, Psinidia, Ps. fenestralis, Ps. capito!, Ps. fuscifrons!, Trimerotropis, T. maritima [Oedipodidae]; Pompholyx [Pneumoridae]; Hymenotes compressus [Tettigidae].

2. 1874. pg. 4, 8, 121. [Jan., 1875.]

Title; dedication. Interlocking of characters in Locustina; defects of the dichotomo-synoptic method of systematization; need of the formation of small genera; difficulties in the description of species. Systematization of the family Locustina; defines synoptically 5 (3 N. A.) subfamilies, in 4 of which 105 genera are defined synoptically; enumerates 93 (16 N. A.) (31 [6 N. A.] new) genera and 150 (22 N. A.) (28 [6 N. A.] new) species. The new genera and the N. A. species are: Dinarchus, Arantia, Ducetia, Elimaea, Caedicia, Polichne, Aphidna, A. alipes, Hormilia tolteca, Scudderia curvicauda, Theudoria, Turpilia, T. punctata!, Phrixa, Ph. nasuta!, Amblycorypha oblongifolia, Microcentrum laurifolium, Philophyllia auttulata, Peucestes, P. dentatus, P. ceronatus!, Posidippus, Frontinus, Aegimia, A. cultrifera! [Phyllophoridae]; Mustius, Cleandrus, Cratvlus, Onomarchus, Sathrophyllia, Tarphe, Termera, Tanusia, Parysatis, Tetragonomera, Pleminia, P. repanda!, Meroncidius atrispinus!, Liparoscelis pallidispina, L. nigrispina, Teleutias, Cocconotus DeGeeri, C. tricornis [Pseudophyllidae]; Vestria, Conocephalus ensiger, C. triops, Xiphidium fasciatum, X. cinereum, X. agile, Subria, Teuthras, Thysdrus, Terpandrus [Conocephalidae].

3. 1875. pg. 4, 10, 105. [Nov., 1875.]

Title; dedication. Proposal of a radically new system of Phasmidae; a natural classification must be made, and appreciated, by fineness of systematic tact and instinctive comprehension of natural relations, rather than by dependence upon characters. Systematization of the family Gryllidae; enumerates 8 (2 N. A.) genera and 13 (3 N. A.) species, viz.: Nemobius fasciatus, Oecanthus niveus, O. bipunctatus. Systematization of the family Phasmidae; defines synoptically 100 genera; enumerates 86 (12 N. A.) (54 [6 N. A.] new) genera and 106 (14 N. A.) (45 [7 N. A.] new) species. The new genera and the N. A. species are: Myronides, Phraortes, Carausias, Dixippus, Clitumnus, Hyrtacus, Stheneboea, (Medaura [s. g. Stheneboea]), Candovia, Macella, Gratidia, Entoria, Promachus, Oxvartes, Menexenus, Phantasis planula, Lamponius, L. Guerini, Caulonia, Libethra, Diapheromera denticrus!, Sermyle, S. mexicana, S. Saussurii!, Dyme, Calynda, C. bicuspis!, Bostra dorsuaria!, B. podagrica, Clonistria Bartholomaea, Phanocles, Hirtuleius, Clitarchus, Anchiale, Vetilia, Arphax, Calvisia, Sosibia, Orxines, Candaules, Sadyattes, Hermachus, Asprenas, Neanthes, Canachus, Obrimus, Tisamenus, Pylaemenes, Datames, Dares, Canuleius, Agathemera, Autolyea, A. pallidicornis!, Decidia, Stratocles, S. cinctipes!, Phocylides, Phasma Menius, Prexaspes, Isagoras, Planudes, Metriotes Diocles, Damasippus, D. Westwoodii!, Leosthenes, Phalees, Macynia, Chitoniseus.